



JINA-CEE Frontiers in Nuclear Astrophysics 2016 (Mar 28-31)

Student & Post-Doc Day: Mon, Mar 28, 16

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| 9:00 | Opening remarks |
| | Session 1: Experimental Equipment and Techniques |
| 9:15 | Rashi Talwar: Bubble Chamber : A new approach towards understanding the $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$ reaction |
| 9:30 | James deBoer: Characterizing neutron background reactions for CASPAR |
| 9:45 | Alex Dombos: Total absorption spectroscopy of neutron-rich nuclei around the A=100 mass region |
| 10:00 | Tony Ahn: Development of a neutron long-counter system for astrophysical (α,n) reaction studies |
| 10:15 | Justin Browne: Commissioning of the JENSA Gas Jet Target with $^4\text{He}(p,p)^4\text{He}$ |
| 10:30 | Brad Schultz: Construction of a multi-reflection time-of-flight mass spectrometer at the University of Notre Dame |
| 10:45-11:00 | Break |
| | Session 2: Compact Objects 1 |
| 11:00 | Oleg Korobkin: Evolution of the gamma- and X-ray radioactive source in macronovae/kilonovae from compact mergers |
| 11:15 | Ermal Rrapaj: Microscopically constrained mean field models from chiral nuclear thermodynamics |
| 11:30 | Max Katz: Mergers and Collisions of White Dwarfs on Adaptive Meshes |
| 11:45-13:00 | Lunch |
| | Session 3: Compact Objects 2 |
| 13:00 | Farrooh Fattoyev: Exploring the Role of Nuclear Symmetry Energy in Large Scale Quantum Simulations of Nuclear Pasta |
| 13:15 | Matthew Caplan: Phase Diagrams, Thermal Conductivities, and Electrical Conductivities of Nuclear Pasta |
| 13:30 | Mackenzie Barton-Rowledge: An Exotic Battery: Neutron Star Heating from New Physics Annihilations |
| 13:45 | Stephan Stetina: Superfluid Hydrodynamics from Field Theory |
| 14:00-14:30 | Break |
| | Session 4: Nuclear Reactions & Structure |
| 14:30 | Stephanie Lyons: Low-Energy $^{20}\text{Ne}(p,\gamma)^{21}\text{Na}$ Cross-section Study with the 5U-4 St. Ana Accelerator |
| 14:45 | Cathleen Fry: Constraining resonance strengths for $^{30}\text{P}(p,\gamma)^{31}\text{S}$ with lifetime measurements |
| 15:00 | Stylios Nikas: Impact of Parametrization on (n, γ) calculations using the statistical model of Hauser-Feshbach |
| 15:15 | Bryce Frenzt: Alpha Cluster States in ^{16}O |
| 15:30 | Gwenaelle Gilardy: ^7Li : a cosmological problem from a nuclear physics perspective |
| 15:45 | Nishanth Sasankan: BBN and CMB Constraints on Dark Radiation Revisited |
| 16:00-16:30 | Break |
| 16:30-17:30 | Carreer Panel |
| 17:30 | End of Student/Post-Doc Day |